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EXAMINER

JELINEK, BRIAN J

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary****Application No.**

09/899,083

**Applicant(s)**

KIM, SUNG BONG

**Examiner**

Brian Jelinek

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

***Response to Amendment***

The Examiner respectfully submits a response to the amendment received on 7/9/2004 of application no. 09/899,083 filed on 7/6/2001 in which claims 1 and 3-26 are currently pending.

The Applicant's arguments have been fully considered but they are not persuasive, as set forth in the following office action.

***Priority***

The Examiner respectfully corrects the previous acknowledgement of the claim for foreign priority, which erroneously indicated a certified copy had been filed in a parent application. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. The Applicant's claim for foreign priority is further recorded on form PTO-326.

***Specification***

The amended Abstract and Title are approved.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being vague, and indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, claim 19 recites the limitation "switching...on the basis of the results of the determining step"; it is unclear to which determining step the limitation is directed.

### ***Claim Objections***

The objection to claim 5 is maintained. Claim 5 is objected to because of the following informalities: there is insufficient antecedent basis for the limitation in the claim. Claim 5 recites the limitation "the determining step" in line 4 of the claim; the Examiner respectfully suggests replacing with "the comparison result".

Claim 8 is objected to because of the following informalities: there is insufficient antecedent basis for the limitation in the claim. Claim 8 recites the limitation "the determining" in lines 5-6 of the claim. Furthermore, claim 8 is labeled "Original", but should be labeled "Currently Amended". Appropriate action is required.

### ***Applicant's Arguments***

**The Examiner respectfully maintains the 102 rejection under Easterly et al. to claims 1-4, 8-11, 15, and 19-21.**

Regarding independent claims 1, 8, 15, and 19, the Applicant asserts that "Easterly et al. does not disclose switching a photographic mode of a camera in any manner whatsoever". However, Easterly et al. discloses varying an aperture in

response to an illumination condition (col. 4, lines 52-59). As a result, Easterly et al. teaches switching a photographing mode of a camera because the aperture shifts from one aperture setting to another, i.e. one functioning arrangement to another (switch: a shift from one to another; mode: a particular functioning arrangement or condition).

**The Examiner respectfully maintains the 102 rejection under Beis to claims 8 and 12.**

Regarding claim 8 and 12, the Applicant argues that Beis does not disclose or suggest "detecting an illumination level of each cell region; and switching the photographing mode of the camera on the basis of determining whether the detected illumination level of each cell region is higher than a previously determined standard illumination level".

In response to the Applicant's arguments, Beis teaches that charge stored in an image sensing element is the signal magnitude, which represents the intensity of the light beam at that location (i.e. cell region) (col. 4, lines 39-42; col. 4, lines 7-9), since pixel data is output row by row and column by column, the signal level of each cell region is detected. Furthermore, Beis teaches that when the intensity exceeds a threshold value a color image sensor is disposed in the light path and when the intensity is below a threshold value a black and white sensor is disposed in the light path (col. 4, lines 49-53).

**The Examiner respectfully maintains the 103 rejection of claims 6-7, 13-19, and 22-23 under Beis in view of Easterly et al.**

Regarding claim 6-7, 13-19, and 22-23, the Applicant asserts that "Beis simply does not disclose the specific features positively recited in the independent claims", i.e. claims 15 and 19.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The Applicant further challenges the motivation to combine Beis in view of Easterly et al. via reason of lack of motivation by asserting that "Beis has no disclosure of a need to modify its twilight switch"; and "all that is presented is a speculative generalized statement that does not constitute a clear particular motivation to combine".

In response to applicant's argument that Beis has no disclosure of a need to modify his twilight switch, the applicant dutifully acknowledges that Beis teaches alternative embodiments of the twilight switch, including the use of "the magnitudes of the electrical output signals or image signals" (Beis: col. 2, lines 31-35). Clearly Beis recognizes the potential advantages of effecting different photographing modes with a variety of ambient light detecting methods. Furthermore, detecting the illumination level according to the statistical method of Easterly et al. would be clearly advantageous in Beis, specifically when using the magnitudes of the output signals, because it capable

of analyzing and interpreting the mass of numerical data produced by the image sensor rather than a single point of data. It is common knowledge in the art that analyzing more data allows a more robust analysis because any particular single reading may be subject to noise or a systematic defect with that particular sensor.

The Applicant further challenges the motivation to combine Beis in view of Easterly et al. via reason of nonanalogous art by asserting that Easterly et al. "Beis and Easterly et al. are concerned with distinctly different problems" and Easterly et al. "has nothing to do with switching between a daytime photographing mode and a nighttime mode".

In response to applicant's argument that Easterly et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both references are concerned about changing a photographing modes in response to an ambient light level in order to produce a proper exposure. Specifically Beis teaches switching between a day and a night video camera when light intensity reaches a threshold value (col. 1, lines 8-11; col. 2, lines 31-35) and Easterly et al. teaches adjusting an aperture when light intensity is less than a threshold value (col. 4, lines 52-59). Clearly both references address analogous problems of producing an optimal exposure.

Further still, the Applicant disputes that Easterly et al. teaches "that a camera may switch to a low light intensity mode when the number of cell regions having a lower illumination level than the standard illumination level is greater than a certain percentage of the total number of cell regions". Easterly et al. specifically teaches that when a low percentage of pixel values (3%) exceed a threshold value, an aperture incrementally opens (corresponding to a low illumination mode) (col. 18, line 62-col. 19, line 11). It is clear that if a low percentage of pixel values (3%) exceed a threshold value then a high percentage of pixel values (97%) must be lower than the threshold value. Similarly, Easterly et al. teaches closing an aperture (corresponding to a high illumination mode) when a high percentage of pixel values exceed a threshold, which is the same case as when a low percentage of pixel values are lower than a threshold value.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 3-4, 8-11, 15, 19-21, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Easterly et al. (U.S. 5,038,216).**

Regarding claim 1, Easterly et al. teaches a method for controlling a CCD camera (Fig. 1A, element 20) comprising the steps of: detecting illumination levels in a



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certain space to be photographed (col. 5, lines 1-4); generating digital image data corresponding to the detected illumination levels (col. 4, lines 50-54; col. 18, lines 67-68); dividing the digital image data into plural cell regions (col. 23, lines 30-33); comparing the detected illumination levels for each cell region to a previously determined standard illumination level (col. 18, lines 62-68; col. 4, lines 57-59); and switching a photographing mode of a camera on the basis of the comparison (col. 18, line 62-col. 19, line 11).

Regarding claim 3, Easterly et al. teaches in the comparing step, it is determined whether the illumination level of each cell region is higher than the standard illumination level (col. 18, line 62-col. 19, line 11, particularly col. 19, lines 7-11).

Regarding claim 4, Easterly et al. teaches the step of switching the photographing mode of the camera comprises the sub-steps of: counting the number of cell regions having a detected illumination level less than the standard illumination level and determining whether the thusly counted number of cell regions is greater than a certain percentage of the total number of cell regions (col. 18, line 54-56; col. 18, line 62-col. 19, line 4); and switching the photographing mode of the camera on the basis of the determination (col. 18, line 62-col. 19, line 11).

It should be noted that while by Easterly et al. does not specifically state that the number of cell regions is counted, counting the cells is inherent in determining a percentage.

Regarding claim 8, Easterly et al. teaches a method of controlling a photographing mode of a camera, comprising the steps of: dividing a photographing

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area into a plurality of cell regions (col. 9, lines 42-45); detecting an illumination level of each cell region (col. 18, lines 51-56); switching the photographing mode of the camera on the basis of the determination whether the detected illumination levels of each cell regions is higher than a previously determined standard illumination level (col. 18, line 62-col. 19, line 11, particularly col. 19, lines 7-11).

Regarding claim 9, Easterly et al. teaches switching the photographing mode of the camera on the basis of determining whether the illumination level of each cell region is higher than a previously determined standard illumination level (col. 18, line 62-col. 19, line 11, particularly col. 19, lines 7-11).

Regarding claim 10, Easterly et al. teaches switching the photographing mode of the camera comprises the sub-steps of: counting the number of cell regions among all the cell regions having a lower illumination level than a previously determined standard illumination level and determining whether the counted number of cell regions is higher than a certain percentage of the total number of cell regions (col. 18, line 54-56; col. 18, line 62-col. 19, line 4); and switching the photographing mode of the camera on the basis of the determination (col. 18, line 62-col. 19, line 11).

It should be noted that while by Easterly et al. does not specifically state that the number of cell regions is counted, counting the cells is inherent in determining a percentage

Regarding claim 11, Easterly et al. teaches the photographing mode of the camera is switched on the basis of comparing the detected illumination levels and the previously determined standard illumination level (col. 18, lines 62-68).

Regarding claim 15, Easterly et al. teaches a method of controlling a photographing mode of a camera, comprising the steps of: dividing a photographing area into a plurality of cell regions and detecting an illumination level of each cell region (col. 4, lines 61-64); determining whether the detected illumination level of each cell region is greater than the previously determined standard illumination level (col. 18, line 54-56; col. 18, line 62-col. 19, line 4); counting the number of the cell regions having a lower illumination level than the standard illumination level and determining whether the counted number is greater than a certain percentage of the total number of cell regions and switching the photographing mode of the camera on the basis of the determination (col. 18, line 62-col. 19, line 11).

It should be noted that while by Easterly et al. does not specifically state that the number of cell regions is counted, counting the cells is inherent in determining a percentage.

Regarding claim 19, Easterly et al. teaches a method of controlling a photographing mode of a camera, comprising the steps of: dividing a photographing area into a plurality of cell regions and detecting the illumination of each cell region (col. 4, lines 61-64); determining whether the illumination of each cell region is greater than a previously determined standard illumination value (col. 18, line 54-56; col. 18, line 62-col. 19, line 4); counting the number of the cell regions having a lower illumination than the standard illumination value and determining whether the counted number of cell regions is greater than a certain percentage of the total number of cell regions (col.

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18, line 54-56; col. 18, line 62-col. 19, line 4); and switching the photographing mode of the camera on the basis of the determination (col. 18, line 62-col. 19, line 11).

It should be noted that while by Easterly et al. does not specifically state that the number of cell regions is counted, counting the cells is inherent in determining a percentage.

Regarding claim 20, Easterly et al. teaches the cell regions divide the photographing area at regular intervals (col. 23, lines 40-45).

Regarding claim 21, Easterly et al. teaches uniformly averaging the illumination of the cell regions regardless of the position of the cell regions (see the light diffuser in Fig. 2A).

Regarding claim 25, Easterly et al. teaches a camera having a photographing mode, comprising: means for dividing a photographing area into a plurality of cell regions (col. 23, lines 30-33); means for detecting an illumination level of each cell region (col. 18, lines 51-56); means for switching the photographing mode of the camera on the basis of the detected illumination levels (col. 18, line 62-col. 19, line 11); and switching the photographing mode of the camera on the basis of determining whether the illumination level of each cell region is higher than a previously determined standard illumination level (col. 18, line 62-col. 19, line 11, particularly col. 19, lines 7-11).

**Claims 8, 12, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Beis (U.S. 5,172,220).**

Regarding claim 8, Beis teaches a method of controlling a photographing mode of a camera, comprising the steps of: dividing a photographing area into a plurality of cell regions (col. 6, lines 21-23); detecting an illumination level of each cell region (col. 4, lines 39-42; col. 4, lines 7-9); switching the photographing mode of the camera on the basis of the determining whether the detected illumination levels of each cell region is higher than a previously determined standard illumination level (col. 4, lines 49-53).

Regarding claim 12, Beis teaches the photographing mode of the camera comprises a daytime mode and a nighttime mode (col. 4, lines 49-53; col. 1, lines 8-10).

Regarding claim 25, Beis teaches a camera having a photographing mode, comprising: means for dividing a photographing area into a plurality of cell regions (col. 6, lines 21-23); means for detecting an illumination level of each cell region (col. 4, lines 39-42; col. 4, lines 7-9); means for switching the photographing mode of the camera on the basis of the detected illumination levels (col. 2, lines 31-39); and switching the photographing mode of the camera on the basis of determining whether the illumination level of each cell region is higher than a previously determined standard illumination level (col. 4, lines 49-53).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 5-7, 13-19, 22-24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beis (U.S. 5,172,220) in view of Easterly et al. (U.S. 5,038,216).**

Regarding claim 1, Beis teaches a method for controlling a CCD camera (col. 6, lines 15-16) comprising the steps of: detecting illumination levels in a certain space to be photographed (col. 2, lines 31-36), since pixel data is output row by row and column by column, the signal level of each cell region is detected; generating image data corresponding to the detected illumination levels (col. 2, lines 1-7); dividing the digital image data into plural cell regions (col. 6, lines 21-23); comparing the detected illumination levels for each cell region to a previously determined standard illumination level (col. 2, lines 34-39); and switching a photographing mode of a camera on the basis of a comparison result (col. 2, lines 31-36).

Furthermore, Beis teaches performing conventional signal processing on the sensor output signals (Fig. 1, elements 6 and 13). Beis does not specifically teach generating digital image data corresponding to the detected illumination levels.

However, Easterly et al. teaches does teach generating digital image data corresponding to detected illumination levels for a plurality of cell regions (col. 18, lines 52-56; col. 18, lines 67-68; col. 23, lines 40-45). One of ordinary skill in the art would have provided the ability to generate digital image data to enable more sophisticated processing of the image data representing each cell where processing is done on the detected illumination levels for a plurality of cell regions for the purpose of statistically determining if an illumination level is excessively bright (col. 19, lines 7-11).

Regarding claim 5, Beis teaches the step of switching the photographing mode of the camera switches the photographing mode of the camera to a daytime mode or a nighttime mode on the basis of the results of a comparison (col. 4, lines 49-53; col. 1, lines 8-10).

Regarding claim 6, Beis teaches comparing the magnitudes of the image signals to a threshold value to determine when to switch between a daytime and nighttime mode (col. 2, lines 31-39; col. 1, lines 8-10). Beis does not specifically teach how the illumination levels of the sensing cell regions are combined to determine if the camera mode should be switched to a nighttime mode, e.g. when the number of cell regions having a lower illumination level than the standard illumination level is greater than a certain percentage of the total number of cell regions.

However, Easterly et al. does teach that a camera may switch to a low light intensity mode when the number of cell regions having a lower illumination level than the standard illumination level is greater than a certain percentage of the total number of cell regions (col. 18, lines 64-col. 19, line 4; also see "Applicant's Arguments" supra).

It is clear that providing in Beis a statistical method for considering the illumination of the plurality of cell regions would make the determination to switch modes more robust by factoring in all available illumination information. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the statistical method of Easterly et al. to determine if a camera should be switched to a nighttime mode on the basis of the intensity of illumination from a plurality of cell regions in order to make the mode-switching decision accurately.

Regarding claim 7, please see the 103 rejection for claim 6 *supra* and note that a daytime mode is switched to a night time mode, and vice versa, upon reaching a threshold (col. 2, lines 31-39; col. 1, lines 8-10).

However, Easterly et al. teaches a camera that switches to a high illumination mode in the case where the number of cell regions having a lower illumination level than the standard illumination level is less than a certain percentage of the total number of cell regions (col. 18, lines 64-70; col. 19, lines 7-11; also see "Applicant's Arguments" *supra*).

Regarding claim 13, please see 103 rejection of claim 6, and further note that Easterly et al. teaches a stored standard illumination level of 240 ( Fig. 7A, block 709 and col. 25, lines 52-55).

Regarding claim 14, see examiner's comments related to claim 7 and 13.

Regarding claim 15, Beis teaches a method of controlling a photographing mode of a camera comprising the steps of: dividing a photographing area into a plurality of cell regions and detecting an illumination level of each cell region (col. 3, lines 2-6 and col. 2, lines 31-36); determining whether the detected illumination level of each cell region is greater than a previously determined standard illumination level and switching the photographing mode of the camera on the basis of the determination (col. 2, lines 31-35).

Beis does not teach counting the number of the cell regions having a lower illumination level than the standard illumination level and determining whether the counted number is greater than a certain percentage of the total number of cell regions.



However, it would have been obvious to one of ordinary skill in the art to use the statistical method of Easterly et al. to evaluate the plurality of cell illuminations in order to determine if the photographing mode of the camera should be switched (see examiners 103 rejection on claim 6).

Regarding claim 16, Beis teaches that the photographing mode of the camera is switched to a daytime mode or nighttime mode on the basis of the illumination determination (col. 1, lines 9-10 and col. 1, lines 47-50).

Regarding claims 17-18, Beis teaches that the photographing mode of the camera is switched to a nighttime mode in the case where there is a lower illumination intensity and to a daytime mode in the case where there is a higher illumination intensity (col. 1, lines 9-10 and col. 1, lines 47-50). Beis does not teach that the determination of illumination is based on the number of the cell regions having a lower illumination level than the standard illumination level that is higher or lower than the certain percentage; this issue is addressed in the 103 rejections for claims 6 and 7 above.

Regarding claim 19, Beis teaches a method of controlling a photographing mode of a camera, comprising the steps of: dividing a photographing area into a plurality of cell regions and detecting the illumination of each cell region (col. 3, lines 2-6); determining whether the illumination of each cell region is greater than a previously determined standard illumination value and switching the photographing mode of the camera on the basis of the determination (col. 2, lines 31-39).

Beis does not teach counting the number of the cell regions having a lower illumination than the standard illumination value and determining whether the counted

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number of cell regions is greater than a certain percentage of the total number of cell regions. The applicant should see the examiner's 103 rejection of claim 6 for a discussion on this issue.

Regarding claim 22, see examiner's 103 rejection of claim 6.

Regarding claim 23, Beis makes no mention of using an optical low pass filter.

Regarding claim 24, Beis teaches a CCD camera (col. 6, lines 15-16) comprising: means for detecting illumination levels in a certain space to be photographed (col. 2, lines 31-36); and means for comparing detected illumination levels for each cell region to a previously determined standard illumination level (col. 2, lines 34-39); and means for switching a photographing mode of a camera on the basis of the comparison result (col. 2, lines 31-36). Furthermore, Beis teaches performing conventional signal processing on the sensor output signals (Fig. 1, elements 6 and 13). Beis does not specifically teach generating digital image data corresponding to the detected illumination levels or determining an average detected illumination in a plurality of regions. However, Easterly et al. teaches does teach generating digital image data corresponding to detected illumination levels for a plurality of cell regions (col. 18, lines 52-56; col. 18, lines 67-68; col. 23, lines 40-45); and determining the average detected illumination using image data in a plurality of regions (col. 4, lines 61-64). One of ordinary skill in the art would have provided the ability to generate digital image data corresponding to detected illumination levels for a plurality of cell regions for the purpose of statistically determining if an illumination level is excessively bright (col. 19, lines 7-11).

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Regarding claim 26, Beis teaches a camera having a photographing mode, comprising: means for dividing a photographing area into a plurality of cell regions (col. 6, lines 21-23) and detecting the illumination of each cell region (col. 2, lines 31-36); means for determining whether the illumination of each cell region is greater than a previously determined standard illumination value (col. 2, lines 35-39); and means for switching the photographing mode of the camera on the basis of the determination (col. 2, lines 31-36). Beis does not specifically teach a means for counting the number of the cell regions having a lower illumination than the standard illumination value; or a means for determining whether the counted number of cell regions is greater than a certain percentage of the total number of cell regions.

However, Easterly et al. teaches counting a number of cell regions having a detected illumination level less than the standard illumination level and determining whether the thusly counted number of cell regions is greater than a certain percentage of the total number of cell regions (col. 18, line 54-56; col. 18, line 62-col. 19, line 4). It should be noted that while by Easterly et al. does not specifically state that the number of cell regions is counted, counting the cells is inherent in determining a percentage. It is clear that providing in Beis a statistical method for considering the illumination of the plurality of cell regions would make the determination to switch modes more robust by factoring in all available illumination information. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the statistical method of Easterly et al. to determine if a camera should be switched to a nighttime mode on

the basis of the intensity of illumination from a plurality of cell regions in order to make the mode-switching decision accurately.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Jelinek whose telephone number is (703) 305-4724. The examiner can normally be reached on M-F 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian Jelinek  
10/22/2004



ANDREW CHRISTENSEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600